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CRUTCHFIELD, CHRISTOPHER M	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/537,134	RUIZ FLORIACH ET AL.	
	Examiner	Art Unit	
	CHRISTOPHER M. CRUTCHFIELD	4144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 February 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *06-02-2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Office Action

Claims 1-32 are pending and have been examined.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. **Claims 1-5, 7, 9, 10-12, 14-21, 23, 25-28, and 30-32** rejected under 35 U.S.C. 103(a) as being unpatentable over *Cuenca*, et al. (Packing Scheme for Layered Coding MPEG-2 Video Transmissions over ATM Based Networks, IEEE ATM Workshop 1997 Proceedings 25-28 May 1997, Pages 168 – 177) and *Worrall*, et al. (IEE Proceedings of Communication, Volume 148, No. 4, August 2001).

For claims 1 and 17, *Cuenca*, et al. (Packing Scheme for Layered Coding MPEG-2 Video Transmissions over ATM Based Networks, IEEE ATM Workshop 1997 Proceedings 25-28 May 1997, Pages 168 – 177) discloses a method for encapsulating media packets having data therein into network streams of media data, (Page 168-169, 1. Introduction, 3rd Paragraph) comprising:

a. Providing base-layer media packets corresponding to a base layer stream of the network streams, the base layer stream comprising network packets (Page 168-169, 1. Introduction, 3rd Paragraph). (The ADP splits the MPEG-2 bit stream into two sub streams [i.e. a base and enhancement layer, See Page 169, 2.1 ADP Scheme Description, Paragraph 2] each of which are encapsulated and transmitted in ATM cells/packets [Page 168-169, 1. Introduction, 3rd Paragraph].)

b. Providing enhancement-layer media packets corresponding to an enhancement layer stream of the network streams, the enhancement layer stream comprising network packets (Page 168-169, 1. Introduction, 3rd Paragraph), wherein a one-to-one correspondence exists between the base-layer media packets and the enhancement-layer media packets. (The ADP splits the

MPEG-2 bit stream into two sub streams [i.e. a base and enhancement layer, See Page 169, 2.1 ADP Scheme Description, Paragraph 2] each of which are encapsulated and transmitted in ATM cells/packets [Page 168-169, 1. Introduction, 3rd Paragraph]. Figure 6, Page 174 demonstrates that each macro block has a single corresponding High Priority/Base Layer macro block portion and Low priority/Enhancement Layer macro block portion. Because each macro block has only one base and one enhancement media packet [i.e. macro block], there is a one to one correspondence between the base and enhancement media layer packets.)

c. Encapsulating the base-layer media packets into the network packets of the base layer stream, (Page 168-169, 1. Introduction, 3rd Paragraph) wherein each network packet of the base layer stream includes a header field (Page 174, Figure 6, "ATM Header"). (The ADP splits the MPEG-2 bit stream into two sub streams [i.e. a base and enhancement layer, See Page 169, 2.1 ADP Scheme Description, Paragraph 2] each of which are encapsulated and transmitted in ATM cells/packets [Page 168-169, 1. Introduction, 3rd Paragraph]. The ATM packet also includes a Header [Page 174, Figure 6, "ATM Header"])

d. Encapsulating the enhancement-layer media packets into the network packets of the enhancement layer stream (Page 168-169, 1. Introduction, 3rd Paragraph), wherein each network packet of the enhancement layer stream includes a header field, (Page 174, Figure 6, "ATM Header") wherein a first portion and a second remaining portion of any enhancement-layer media packet may be

respectively included in successive network packets of the enhancement layer stream in order to have each network packet of the enhancement layer stream filled to a constant number of bits NE that does not exceed a maximum number of bits NEMAX, (Page 174, Figure 6) subject to the last network packet of the enhancement layer stream being required to be filled to only as many bits as is necessary to include the last enhancement-layer media packet of the enhancement-layer media packets. (The ADP splits the MPEG-2 bit stream into two sub streams [i.e. a base and enhancement layer, See Page 169, 2.1 ADP Scheme Description, Paragraph 2] each of which are encapsulated and transmitted in ATM cells/packets [Page 168-169, 1. Introduction, 3rd Paragraph]. The ATM packet also includes a Header [Page 174, Figure 6, "ATM Header"]. The packet also includes both a complete macro block [i.e. first portion, Figure 6, Low Priority Packing Scheme, MB1] and the remainder of any macro block that did not completely fit in a previous packet [i.e. second remaining portion, Figure 6, Low Priority Packing Scheme, MB]. The Low Priority Packing Scheme/Enhancement Layer Packing Scheme fills the payload of the packets to a constant 47 bytes [i.e. NE], which is the maximum frame size of and ATM cell/packet [i.e. NEMAX] [It is noted that ATM has a 47 byte payload]. It is implicit that in a direct packetization scheme, where multiple macro blocks are included in a single packet, that the final packet may have less then a complete payload because the combined size of all macro blocks is unlikely to precisely equal the sum of the size of all payload segments of the encapsulating packets. This

> necessitates that the final enhancement layer packet must be filled to only as many bits as is necessary to include the last enhancement-layer media packet of the enhancement-layer media packets, as no more data to be transmitted exists, with the remainder of the payload either being stuffed [if the packets are fixed length], or in the case of variable length packets, the packet length adjusted.)

Cuenca, et al. (Packing Scheme for Layered Coding MPEG-2 Video Transmissions over ATM Based Networks, IEEE ATM Workshop 1997 Proceedings 25-28 May 1997, Pages 168 – 177) does not disclose that each network packet of the base layer stream includes one, and no more than one, corresponding base-layer media packet. *Worrall*, et al. (IEE Proceedings of Communication, Volume 148, No. 4, August 2001) from the same or similar field of endeavor discloses a network packet stream that includes one, and no more than one, corresponding media packet (Figure 1, RTP Packetization Scheme 1). Thus, it would have been obvious to a person of ordinary skill in the art to combine the singular packetization scheme of *Worrall*, et al. in the transmission scheme of *Cuenca*, et al. The singular packetization scheme of *Worrall*, et al. can be modified/implemented into the transmission scheme of *Cuenca*, et al. by encapsulating each base layer packet of *Cuenca*, et al. in a single packet. The motive to combine the singular packetization scheme of *Worrall*, et al. with the transmission scheme of *Cuenca*, et al. is provided by *Worrall*, et al. (*Worrall*, Figure 4) which states that better "effective error rates" can be achieved using a singular packetization scheme. (*Worrall*, Figure 4a represents the "effective error rate" [i.e. mpeg packet loss

rate, See Page 197, 2. Analysis of RTP Packetizaiton to 2.1 Analysis of Scheme 1] for a packet scheme where there is a single media packet per network packet. In comparison with a scheme with multiple media packets per network packet as shown in *Worrall*, Figure 4b, it can be seen that encoding a single media packet per network packet results in a decreased effective error rate for most packet sizes when the bit error rate is 10^-3 and 10^-4.)

Cuenca, et al. (Packing Scheme for Layered Coding MPEG-2 Video Transmissions over ATM Based Networks, IEEE ATM Workshop 1997 Proceedings 25-28 May 1997, Pages 168 – 177) and *Worrall*, et al. do not disclose that the network packet of the *base layer stream* includes one, and no more than one, corresponding *base-layer* media packet. However, *Worrall*, et al. does disclose that singular packetization reduces the "effective error rate" (See Claim 1, Above) at the cost of increasing packet overhead (Page 199, 2.3 Comparison of Schemes). *Cuenca*, et al. also discloses that the base stream traffic is of much higher priority then the enhanced layer traffic, because a loss of the base layer results in an image that is not minimally acceptable (Page 169, 2.1 ADP Scheme Description, Third Paragraph). Thus, it would have been obvious to sacrifice the additional bandwidth required for a singular packetization scheme in the base layer, which requires enhanced reliability, while maintaining the higher throughput (but reduced reliability) of multiple media packets per network packet in the less crucial enhanced layer. Thus it would have been obvious to a person of ordinary skill in the art to combine the base layer single packetizaiton scheme of *Worrall*, et al. with the transmission scheme of *Cuenca*, et al. The base layer singular

packetization scheme of *Worrall*, et al. can be modified/implemented into the transmission scheme of *Cuenca*, et al. by encapsulating each base layer packet of *Cuenca*, et al. in a single packet. The motive to combine the base layer singular packetization scheme with the transmission scheme of *Cuenca*, et al. is to enhance base layer reliability by sacrificing the additional bandwidth required for a singular packetization scheme in the base layer, while maintaining higher throughput (but reduced reliability) in the less crucial enhanced layer (see supra).

For claims 2 and 18, *Cuenca*, et al. (Packing Scheme for Layered Coding MPEG-2 Video Transmissions over ATM Based Networks, IEEE ATM Workshop 1997 Proceedings 25-28 May 1997, Pages 168 – 177) does not disclose a packet structure of the network streams conforms to the Real-Time Protocol (RTP) standard published as Request For Comments (RFC) 1889 by the Internet Engineering Task Force (IETF). *Worrall*, et al. (IEE Proceedings of Communication, Volume 148, No. 4, August 2001) from the same or similar field of endeavor discloses the use of the Real-Time Protocol (RTP) standard published as Request For Comments (RFC) 1889 (Page 197, 1. Introduction). Therefore, it would have been obvious to a person of ordinary skill in the pertinent art at the time of the invention that the transport method of *Cuenca*, et al. could utilize the Real-Time Protocol of *Worrall*, et al. The Real-Time Protocol of *Worrall*, et al. can be modified/implemented into the system of *Cuenca*, et al. by transmitting the network packets using the Real-Time Protocol standard. The motive to combine Real-Time Protocol transport of *Worrall*, et al. with the system of *Cuenca*, et al. is to allow the

use of packets complying with the Real-Time Protocol, therefore improving interoperability and adhering to a common and well known standard.

For claims 3 and 19, *Cuenca*, et al. (Packing Scheme for Layered Coding MPEG-2 Video Transmissions over ATM Based Networks, IEEE ATM Workshop 1997 Proceedings 25-28 May 1997, Pages 168 – 177) discloses NE=NEMAX (Page 174, Figure 6). (The Low Priority Packing Scheme/Enhancement Layer Packing Scheme fills the payload of the packets to a constant 47 bytes, which results in a frame size [i.e. NE] of 53 Bytes which is equal to the maximum frame size of an ATM cell/packet [i.e. NEMAX] [It is noted that an ATM cell is 53 bytes]).

For claims 4 and 20, *Cuenca*, et al. (Packing Scheme for Layered Coding MPEG-2 Video Transmissions over ATM Based Networks, IEEE ATM Workshop 1997 Proceedings 25-28 May 1997, Pages 168 – 177) does not disclose NE<NEMAX. *Worrall*, et al. (IEE Proceedings of Communication, Volume 148, No. 4, August 2001) from the same or similar field of endeavor discloses NE<NEMAX. (NE, the number of bits in the enhancement layer stream [*Worrall*, Page 198, Figure 3, V] is set by V. The maximum length of a UDP datagram [i.e. NEMAX] varies with the network configuration, but in the network of *Worrall*, et al is at least 6000 Bytes [Page 199, Figure 4] and therefore, NE < NEMAX when the system of *Cuenca*, et al. transmits with a packet size less then 6000 bytes [see, for example, Figure 4a, Packet Length 2500 Bytes]). Thus, it would have been obvious to a person of ordinary skill in the pertinent art at the time of the invention to combine the less then maximal transmission size of *Worrall*, et al. with the transmission system of *Cuenca*, et al. The less then maximal transmission size of

Worrall, et al. can be modified/implemented into the transmission system of *Cuenca*, et al. by having the transmission system of *Cuenca*, et al. transmit UDP packets instead of ATM packets. Thus, one of ordinary skill in the art could have substituted the use of the ATM Cells of *Cuenca*, et al. for the TCP/IP UDP packets of *Worrall*, et al. and yielded the predictable result of a transmission that complied with the TCP/IP UDP protocol and comprised packets where NE < NEMAX.

For claims 5 and 21, *Cuenca*, et al. (Packing Scheme for Layered Coding MPEG-2 Video Transmissions over ATM Based Networks, IEEE ATM Workshop 1997 Proceedings 25-28 May 1997, Pages 168 – 177) discloses that the enhancement-layer media packets are enhancement-layer video packets, and wherein the media data is video data (Page 168-169, 1. Introduction, 3rd Paragraph).

For claims 7 and 23, *Cuenca*, et al. discloses the data content of the base-layer media packets is in a compressed format, wherein data content of the enhancement-layer media packets is in a compressed format, and wherein the media data is in a compressed format (Page 173, Last Paragraph).

For claims 9 and 25, *Cuenca*, et al. (Packing Scheme for Layered Coding MPEG-2 Video Transmissions over ATM Based Networks, IEEE ATM Workshop 1997 Proceedings 25-28 May 1997, Pages 168 – 177) does not disclose the base-layer media packets and the enhancement-layer media packets are variable length packets. *Worrall*, et al. (IEE Proceedings of Communication, Volume 148, No. 4, August 2001) from the same or similar field of endeavor discloses the base-layer media packets and the enhancement-layer media packets are variable length packets. (The base and

enhancement packets of *Worrall*, et al. are transmitted using TCP/IP UDP packets, [Page 197, 1. Introduction] which are noted to be of variable length). Thus, it would have been obvious to a person of ordinary skill in the pertinent art at the time of the invention to combine the variable transmission size of *Worrall*, et al. with the transmission system of *Cuenca*, et al. The variable transmission size of *Worrall*, et al. can be modified/implemented into the transmission system of *Cuenca*, et al. by having the transmission system of *Cuenca*, et al. transmit TCP/IP UDP packets instead of ATM packets. Thus, one of ordinary skill in the art could have substituted the use of the ATM Cells of *Cuenca*, et al. for the TCP/IP UDP packets of *Worrall*, et al. and yielded the predictable result of a transmission that complied with the TCP/IP UDP protocol and comprised variable length packets.

For claims 10 and 26, *Cuenca*, et al. discloses the base-layer media packets and the enhancement-layer media packets are constant length packets (Page 174, Figure 6). (Both the base and enhancement layers are sent via frame relay, which is noted to be a constant length packet/frame).

For claims 11 and 27, *Cuenca*, et al. (Packing Scheme for Layered Coding MPEG-2 Video Transmissions over ATM Based Networks, IEEE ATM Workshop 1997 Proceedings 25-28 May 1997, Pages 168 – 177) discloses the enhancement-layer media packets are constant length packets (Page 174, Figure 6). (The enhancement layer is sent via frame relay, which is noted to be a constant length packet/frame). *Cuenca*, et al. does not disclose the base-layer media packets are variable length packets. *Worrall*, et al. (IEE Proceedings of Communication, Volume 148, No. 4, August

2001) from the same or similar field of endeavor discloses the base-layer media packets are variable length packets. (The base layer packets of *Worrall*, et al. are transmitted using TCP/IP UDP packets, [Page 197, 1. Introduction] which are noted to be of variable length). Thus, it would have been obvious to a person of ordinary skill in the pertinent art at the time of the invention to combine the variable base layer transmission size of *Worrall*, et al. with the transmission system of *Cuenca*, et al. The variable base layer transmission size of *Worrall*, et al. can be modified/implemented into the transmission system of *Cuenca*, et al. by having the base layer transmission system of *Cuenca*, et al. transmit TCP/IP UDP packets instead of ATM packets. Thus, one of ordinary skill in the art could have substituted the ATM Cells in the base layer of *Cuenca*, et al. with the base layer TCP/IP UDP packets of *Worrall*, et al. and yielded the predictable result of a base layer transmission that complied with the TCP/IP UDP protocol and comprised variable length packets.

For claims 12 and 28, *Cuenca*, et al. (Packing Scheme for Layered Coding MPEG-2 Video Transmissions over ATM Based Networks, IEEE ATM Workshop 1997 Proceedings 25-28 May 1997, Pages 168 – 177) discloses the base-layer media packets are constant length packets (Page 174, Figure 6). (The base layer is sent via frame relay, which is noted to be a constant length packet/frame). *Cuenca*, et al. does not disclose the enhancement-layer media packets are variable length packets. *Worrall*, et al. (IEE Proceedings of Communication, Volume 148, No. 4, August 2001) from the same or similar field of endeavor discloses the enhancement-layer media packets are variable length packets. (The enhancement packets of *Worrall*, et al. are transmitted

using TCP/IP UDP packets, [Page 197, 1. Introduction] which are noted to be of variable length). Thus, it would have been obvious to a person of ordinary skill in the pertinent art at the time of the invention to combine the variable enhancement layer transmission size of *Worrall*, et al. with the transmission system of *Cuenca*, et al. The variable enhancement layer transmission size of *Worrall*, et al. can be modified/implemented into the transmission system of *Cuenca*, et al. by having the enchancement layer transmission system of *Cuenca*, et al. transmit TCP/IP UDP packets instead of ATM packets. Thus, one of ordinary skill in the art could have substituted the ATM Cells in the enhancement layer of *Cuenca*, et al. with the enhancement layer TCP/IP UDP packets of *Worrall*, et al. and yielded the predictable result of a enhancement layer transmission that complied with the TCP/IP UDP protocol and comprised variable length packets.

For claims 14 and 30, *Cuenca*, et al. discloses a first constant length, and wherein the header field included within each network packet of the enhancement layer stream has a second constant length (Page 174, Figure 6). (Both of the transmission schemes use ATM, which has a fixed header length of 6 Bytes)

For claims 15 and 31, *Cuenca*, et al. discloses the first constant length equals the second constant length (Page 174, Figure 6). (Both of the transmission schemes use ATM, which has a fixed header length of 6 Bytes)

For claims 16 and 32, *Cuenca*, et al. (Packing Scheme for Layered Coding MPEG-2 Video Transmissions over ATM Based Networks, IEEE ATM Workshop 1997 Proceedings 25-28 May 1997, Pages 168 – 177) discloses the enhancement-layer

media packets are constant length packets with a header length of 6 bytes (Page 174, Figure 6). (The enhancement layer is sent via frame relay, which is noted to have a constant length 6 byte header). *Cuenca*, et al. does not disclose the enhanced-layer media packets have a different constant length then the base layer media packets. *Worrall*, et al. (IEE Proceedings of Communication, Volume 148, No. 4, August 2001) from the same or similar field of endeavor discloses the enhancement layer media packets have a different constant length header then the base-layer packets (Figure 1, RTP/UDP/IP Header of 320 Bytes). (The enhancement layer packets of *Worrall*, et al. have a 320 byte fixed header [*Worrall*, Figure 1, RTP/UDP/IP Header] which is a different length then the Fixed 6 Byte header of the ATM cells of *Cuenca*, et al. [*Cuenca*, Page 174, Figure 6]). Thus, it would have been obvious to a person of ordinary skill in the pertinent art at the time of the invention to use the TCP/UDP 320 Byte enhancement layer header of *Worrall*, et al. in the system of *Cuenca*, et al. The TCP/UDP 320 Byte enhancement layer header of *Worrall*, et al. can be modified/implemented into the system of *Cuenca*, et al. by transmitting the enhancement layer using TCP/UDP packets instead of ATM Cells. Thus, one of ordinary skill in the art could have substituted the ATM Cells in the enchancement layer of *Cuenca*, et al. with the enchancement layer TCP/IP UDP packets of *Worrall*, et al. and yielded the predictable result of a enchanced layer transmission that complied with the TCP/IP UDP protocol and comprised a constant length packet header that differs from the constant length header of the base layer.

5. **Claims 6 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Cuenca*, et al. (Packing Scheme for Layered Coding MPEG-2 Video Transmissions over ATM Based Networks, IEEE ATM Workshop 1997 Proceedings 25-28 May 1997, Pages 168 – 177) and *Worrall*, et al. (IEE Proceedings of Communication, Volume 148, No. 4, August 2001) as applied to claims 1 and 17 above, and further in view of *Rose*, et al. (US Patent No. 7,289,675).

For claims 6 and 22 *Cuenca*, et al. (Packing Scheme for Layered Coding MPEG-2 Video Transmissions over ATM Based Networks, IEEE ATM Workshop 1997 Proceedings 25-28 May 1997, Pages 168 – 177) and *Worrall*, et al. (IEE Proceedings of Communication, Volume 148, No. 4, August 2001) do not disclose the base-layer media packets are base-layer audio packets, wherein the enhancement-layer media packets are enhancement-layer audio packets, and wherein the media data is audio data. *Rose*, et al. (US Patent No. 7,289,675) from the same or similar field of endeavor discloses the base-layer media packets are base-layer audio packets, wherein the enhancement-layer media packets are enhancement-layer audio packets, and wherein the media data is audio data (Column 9, Lines 43-56 and Claim 1). Thus it would have been obvious to a person of ordinary skill in the pertinent art to use the audio media encoder of *Rose*, et al. in the transmission system of *Cuenca*, et al. The audio media encoder of *Rose*, et al. can be modified/implemented into the transmission system of *Cuenca*, et al. by having the media packets of *Cuenca*, et al. contain audio. Thus, one of ordinary skill in the pertinent art could have substituted the video media packets of *Cuenca*, et al. with the

audio media packets of *Rose*, et al. to yield the predictable result of an streaming transmission of audio as opposed to video.

6. **Claims 8 and 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Cuenca*, et al. (Packing Scheme for Layered Coding MPEG-2 Video Transmissions over ATM Based Networks, IEEE ATM Workshop 1997 Proceedings 25-28 May 1997, Pages 168 – 177) and *Worrall*, et al. (IEE Proceedings of Communication, Volume 148, No. 4, August 2001) as applied to claims 1 and 17 above, and further in view of *Hughes, Jr. et al.* (US Pre Grant Publication No. 2001/0038746).

For claims 8 and 24, *Cuenca*, et al. (Packing Scheme for Layered Coding MPEG-2 Video Transmissions over ATM Based Networks, IEEE ATM Workshop 1997 Proceedings 25-28 May 1997, Pages 168 – 177) and *Worrall*, et al. (IEE Proceedings of Communication, Volume 148, No. 4, August 2001) do not disclose the media data is in an uncompressed format. *Hughes, Jr. et al.* (US Pre Grant Publication No. 2001/0038746) from the same or similar field of endeavor discloses the media data is in an uncompressed format (Figure 1, Elements 102 and 104). (The output of the base and enhancement layer generators [Fig 1, Elements 102 and 104] is an uncompressed video stream.) Thus it would have been obvious to a person of ordinary skill in the pertinent art that the media data in the base and enhancement layers could be uncompressed. The uncompressed medial data generator of *Hughes, Jr. et al.* can be modified/implemented into the system of *Cuenca*, et al. by transmitting uncompressed video data and the corresponding resynchronization markers in the system of *Cuenca*, et al. as stated in claim 1 above. The motive to combine uncompressed video

transmission of *Hughes, Jr. et al.* with the system of *Cuenca*, et al. is to allow for uncompressed video transmission, reducing the required processing at the receiving computer.

For claims 8 and 24, *Cuenca*, et al. (Packing Scheme for Layered Coding MPEG-2 Video Transmissions over ATM Based Networks, IEEE ATM Workshop 1997 Proceedings 25-28 May 1997, Pages 168 – 177) and *Worrall*, et al. (IEE Proceedings of Communication, Volume 148, No. 4, August 2001) and *Hughes, Jr. et al.* (US Pre Grant Publication No. 2001/0038746) do not disclose the base-layer media packets is in an uncompressed format, wherein data content of the enhancement-layer media packets is in an uncompressed format. However, the use of packets to transmit any type data, compressed or uncompressed, was well known in the art at the time of the invention. Furthermore, it is also noted that both compressed and uncompressed media data packets still require a re-synchronization marker (See also applicants specification, Page 3, Lines 4-8) as taught by *Worrall*, et al. (*Worrall*, Figure 1, First Partition) and therefore the rationale stated in claim 1 likewise apply to the combination of *Cuenca*, et al. and *Worrall*, et al. in an uncompressed media system. Therefore, it would have been obvious to a person of ordinary skill in the pertinent art at the time of the invention to combine the use of uncompressed base and enhancement layer packets with the system of *Cuenca*, et al. The uncompressed base and enhancement layer packets can be modified/implemented into the system of *Cuenca*, et al. by transmitting uncompressed video data and the corresponding resynchronization markers in the system of *Cuenca*, et al. The motive to combine uncompressed base and enhancement

layer packets with the system of *Cuenca*, et al. is to allow for uncompressed video transmission, reducing the required processing at the receiving computer.

7. **Claims 13 and 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Cuenca*, et al. (Packing Scheme for Layered Coding MPEG-2 Video Transmissions over ATM Based Networks, IEEE ATM Workshop 1997 Proceedings 25-28 May 1997, Pages 168 – 177) and *Worrall*, et al. (IEE Proceedings of Communication, Volume 148, No. 4, August 2001) as applied to claims 1 and 17 above, and further in view of RFC 1889 (Schulzrinne, et al, Request for Comments: 1889, January 1996).

For claims 13 and 29, *Cuenca*, et al. (Packing Scheme for Layered Coding MPEG-2 Video Transmissions over ATM Based Networks, IEEE ATM Workshop 1997 Proceedings 25-28 May 1997, Pages 168 – 177) and *Worrall*, et al. (IEE Proceedings of Communication, Volume 148, No. 4, August 2001) do not disclose the header field included within each network packet of the base layer stream has a variable length, and wherein the header field included within each network packet of the enhancement layer stream has a variable length. RFC 1889 (Schulzrinne, et al, Request for Comments: 1889, January 1996) discloses that the header field the header field included within each network packet of the base layer stream has a variable length, and wherein the header field included within each network packet of the enhancement layer stream has a variable length (5.3.1 RTP Header Extensions). (The header extensions of RTP as disclosed in 5.3.1 RTP Header Extensions create a variable length RTP header). Thus it would have been obvious to a person of ordinary skill in the pertinent art at the time of the invention to include the RTP variable length headers of RFC 1889 in the system of

Cuenca, et al. The RTP variable length headers of RFC 1889 can be modified/implemented into the system of *Cuenca*, et al. by having the system transmit TCP/IP RTP packets with variable length header extensions. Thus, one of ordinary skill in the pertinent art could have substituted the TCP/IP packets with RTP variable length headers of RFC 1889 for the ATM cells of *Rose*, et al. to yield the predictable result of a TCP/IP packets with a variable length header.

Prior Art made of Record and not Relied Upon

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Zhang, et al. (US Pre Grant Publication No. 20050041745 A1)

Lin, et al. (US Patent No. 5742599 A)

Wu, et al. (US Pre Grant Publication No. 20020150158)

Contact Information

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Crutchfield whose telephone number is (571) 270-3989. The examiner can normally be reached Monday through Friday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Garber, can be reached at 571-272-2194. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Examiner, Art Unit 4144
3/11/2008

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